
SCALING THE MATTERHORN.

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AN admirable description of the difficulties of the Matterhorn, up to a certain elevation, has been given by Mr. Hawkins, in "Vacation Tourists for 1860." At that time, however, a temporary danger, sufficient to quell for a time the enthusiasm even of our lion-hearted guide, was added to the permanent ones. Fresh snow had

fallen two days before; it had quite oversprinkled the Matterhorn, converting the brown of its crags into an iron gray; this snow had been melted and refrozen, forming upon the rocks an enamelling of ice. Besides their physical front, moreover, in 1860, the rocks presented a psychological one, derived from the rumor of their savage inaccessibility. The crags, the ice, and the character of the mountain, all conspired to stir the feelings. Much of the wild mystery has now vanished, especially at those points which, in 1860, were places of virgin difficulty, but down which ropes now hang to assist the climber. The grandeur of the Matterhorn is, however, not to be effaced.

After some hours of steady climbing, we halted upon a platform beside the tattered remnant of one of my tents, had a mouthful of food, and sunned ourselves for an hour. We subsequently worked upward, scaling the crags and rounding the bases of those wild and wonderful rock-towers, into which the weather of ages has hewn the southern *arête* of the Matterhorn. The work here requires knowledge, but with a fair amount of skill it is safe work. I can fancy nothing more fascinating to a man given by nature and habit to such things, than a climb *alone* among these crags and precipices. He need not be *theological*, but, if complete, he must be religious, with such an environment. To the climber amongst them, the southern cliffs and crags of the Matterhorn are incomparably grander than those of the north. Majesty of form and magnitude, and richness of coloring, combine to ennoble them.

Looked at from Breuil, the Matterhorn presents two summits: the one, the summit proper, a square rock-tower in appearance; the other, which is really the end of a sharp ridge abutting against the rock-tower, an apparently conical peak. On this peak Bennen and myself planted our flag-staff in 1862, and with it, which had no previous name, Italian writers have done me the honor of associating mine. At some distance below it the mountain is crossed by an almost horizontal ledge, always loaded with snow, which, from its resemblance to a white neck-tie, has been called the *Cravatte*. On the ledge a cabin was put together last year. It stands above the precipice where I quitted my rope in 1862. Up this precipice, by the aid of a thicker—I will not say a stronger—rope, we now scrambled, and, following the exact route pursued by Bennen and myself five years previously, we came to the end of the *Cravatte*. At some places the snow upon the ledge fell steeply from its junction with the cliff; deep-step cutting was also needed where the substance had been melted and recongealed. The passage was soon accomplished along the *Cravatte* to the cabin, which was almost filled with snow.

Our first inquiry now had reference to the supply of water. We could, of course, always melt the snow, but this would involve a wasteful expenditure of heat. The cliff at the base of which the hut was built overhung, and from its edge the liquefied snow fell in showers beyond the cabin. Four ice-axes were fixed on the ledge, and over them was spread the residue of a second tent which I had left at Breuil in 1862. The water falling upon the canvas flowed toward its centre. Here an orifice was formed, through which the liquid descended into vessels placed to receive it. Some modification of this plan might probably be employed with profit for the storing up of water in drougthy years in England.

I lay for some hours in the warm sunshine, in presence of the Italian mountains, watching the mutations of the air. But when the sun sank the air became chill, and we all retired to the cabin. We had no fire, though warmth was much needed. A lover of the mountains, and of his kind, had contributed an India-rubber mattress to the cabin. On this I lay down, a light blanket being thrown over me, while the guides and porters were rolled up in sheepskins. The mattress was a poor defence against the cold of the subjacent rock. I bore this for two hours, unwilling to disturb the guides, but at length it became intolerable. The little circles, with a speck of intensified redness in the centre, which spotted the neck of our volunteer porter, prevented me from availing myself of the warmth of my companions, so I lay alone and suffered the penalty of isolation. On learning my condition, however, the good fellows were soon alert, and, folding a sheepskin round me, restored me gradually to a pleasant temperature. I fell asleep, and found the guides preparing breakfast, and the morning well advanced, when I opened my eyes.

It was past six o'clock when the two Maquignazes and myself quitted the cabin. The porters deemed their work accomplished, but they halted for a time to ascertain whether we were likely to be driven back or to push forward. We skirted the *Cravatte*, and reached the

ridge at its western extremity. This we ascended along the old route of Bennen and myself to the conical peak already referred to, which, as seen from Breuil, constitutes a kind of second summit of the Matterhorn. From this point to the base of the final crag of the mountain stretches an *arête*, terribly hacked by the weather, but on the whole horizontal. When I first made the acquaintance of this savage ridge it was almost clear of snow. It was now loaded, the snow being bevelled to an edge of exceeding sharpness. The slope to the left, falling toward Zmutt, was exceedingly steep, while the precipices on the right were abysmal. No other part of the Matterhorn do I remember with greater interest than this. It was terrible, but its difficulties were fairly within the grasp of human skill, and this association is more elevating than where the circumstances are such as to make you conscious of your own helplessness. On one of the sharpest teeth of the Spalla, Joseph Maquignaz halted, and, turning to me with a smile, remarked, "There is no room for giddiness here, sir." In fact, such possibilities, in such places, must be altogether excluded from the chapter of accidents of the climber.

It was at the end of this ridge, where it abuts against the last precipice of the Matterhorn, that my second flag-staff was left in 1862. I think there must have been something in the light falling upon this precipice that gave it an aspect of greater verticality when I first saw it than it seemed to possess on the present occasion. Or, as remarked in my brief account of our attempt in the *Saturday Review*, we may have been dazed by our previous exertion. I cannot otherwise account for our stopping short without making some attempt upon the precipice. It looks very bad, but no climber with his blood warm would pronounce it, without trial, insuperable. Fears of this rock-wall, however, had been excited long before we reached it. At three several places upon the *arête* I had to signalize points in advance, and to ask my companions in French (which Bennen alone did not understand) whether they thought these points could be reached without peril. Thus, bit by bit, we moved along the ridge to its end, where further advance was declared to be impossible. It was probably the addition of the psychological element to the physical; the reluctance to encounter new dangers on a mountain which had hitherto inspired a superstitious fear, that quelled further exertion.

To assure myself of the correctness of what is here stated, I have turned to my notes of 1862. The reperusal of them has interested me, and a portion of them may possibly interest some of the readers of this magazine. Here, then, they are, rapidly thrown together, and embracing our passage from the crags adjacent to the Col du Lion to the point where we were compelled to halt:

"We had gathered up our things, and bent to the work before us, when suddenly an explosion occurred overhead. Looking aloft, in mid-air was seen a solid shot from the Matterhorn, describing its proper parabola through the air. It split to pieces as it hit one of the rock-towers below, and its fragments came down in a kind of spray, which fell wide of us, but still near enough to compel a sharp look-out. Two or three such explosions occurred afterward, but we crept along the back-fin of the mountain, from which the falling boulders were speedily deflected right and left. Before the set of sun, we reached our place of bivouac. A tent was already there. Its owner had finished a prolonged attack upon the Matterhorn, and kindly permitted the tent to remain, thus saving me the labor of carrying up one of my own. I had with me a second and smaller tent, made for me under the friendly supervision of Mr. Whympier, which the exceedingly nimble-handed Carrel soon placed in position upon a platform of stones. Both tents stood in the shadow of a great rock, which sheltered us from all projectiles from the heights.

"As the evening advanced, fog, the enemy of the climber, came creeping up the valley, and heavy flounces of cloud draped the bases of the hills. The fog thickened through a series of intermittences which only a mountain-land can show. Sudden uprushings of air would carry the clouds aloft in vertical currents, while at other places horizontal gusts wildly tossed them to and fro; or, impinging upon each other at oblique angles, formed whirling cyclones of cloud. The air was tortured on its search of equilibrium. Explosive peals above us, succeeded by the sound of tumbling rocks, were heard from time to time. We were swathed in the densest fog when we retired to rest, and had scarcely a hope that the morrow's sun would be able to dispel the gloom. Throughout the night I heard the intermittent roar of the stones as they rushed down an adjacent couloir. Looking at midnight through a small hole in the canvas of my tent, I

saw a star. I rose, and found the heavens without a cloud; while above me the black battlements of the Matterhorn were projected against the fretted sky.

"It was four A. M. before we started. We adhered to the hacked and weatherworn spine, until its disintegration became too vast. The alternations of sun and frost have made wondrous havoc on the southern face of the Matterhorn; cutting much away, but leaving brown-red masses of the most imposing magnitude behind—pillars, and towers, and splintered obelisks, clearly cut out of the mountain—grand in their hoariness, and softened by the coloring of age. At length we were compelled to quit the ridge for the base of a precipice which seemed to girdle the mountain like a wall. It was a clean section of rock, with cracks and narrow ledges here and there. We sought to turn this wall in vain. Bennen swerved to the right and to the left to make his inspection complete. There was no alternative: over the precipice we must go, or else retreat. For a time it was manifest our onset must be desperate. We grappled with the cliff. Walters, an exceedingly powerful climber, went first. Close to him was Bennen, with arm and knee and counsel ready in time of need. As usual, I followed Bennen, while the two porters brought up the rear. The behavior of all of them was admirable. A process of reciprocal lifting continued for half an hour, when a last strong effort threw Walters across the brow of the precipice, and rendered our progress thus far secure.

"After scaling the precipice, we found ourselves once more upon the ridge with safe footing on the ledges of gneiss. We approached the conical peak seen from Breuil, while before us, and, as we thought, assuredly within our grasp, was the proper summit of the renowned Matterhorn. To test Bennen's feelings, I remarked, 'We shall at all events reach the lower peak.' There was a kind of scorn in his laugh as he replied, stretching his arm toward the summit, 'In an hour, sir, the people of Zermatt will see our flag-staff planted yonder.' We went upward in this spirit, a triumph forestalled, making the ascent a jubilee.

"We reached the first summit, and on it fixed our flag. But already doubt had begun to settle about the final precipice. Walters once remarked, 'We may still find difficulty there.' It was, perhaps, the pressure of the same thought upon my own mind that caused its utterance to irritate me. So I grimly admonished Walters and we went on. The nearer, however, we came to the summit, the more formidable did the precipice appear. From the point where we had planted our flagstaff a hacked and extremely acute ridge (the Spalla), with ghastly abysses right and left of it, ran straight against the final cliff. We sat down upon the ridge and inspected the precipice. Three out of the four men shook their heads, and muttered, 'Impossible.' Bennen was the only man amongst them who refused, from first to last, to utter the word.

"Resolved not to push them beyond the limits of their own clear judgments, I was equally determined to advance until that judgment should pronounce the risk too great. I, therefore, pointed to a tooth at some distance from the place where we sat, and asked whether it could be reached without much danger. 'We think so,' was the reply. 'Then, let us go there.' We did so and sat down again. The three men murmured, while Bennen himself growled like a foiled lion. 'We must give it up,' was here repeated. 'Not yet,' was my answer. 'You see yonder point quite at the base of the precipice; do you not think we might reach it?' The reply was 'Yes.' We moved cautiously along the *arête* and reached the point aimed at. So savage a spot I had never previously visited, and we sat down there with broken hopes. The thought of retreat was bitter. We may have been dazed by our previous efforts, and thus rendered less competent than fresh men would have been to front the danger before us. As on other occasions, Bennen sought to fix on me the onus of returning, but with the usual result. My reply was, 'Where you go, I follow, whether it be up or down.' It took him half an hour to make up his mind. Had the other men not yielded so utterly, he would probably have tried longer. As it was, our occupation was gone, and hacking a length of six feet from our ladder, we planted it on the spot where we halted." So much is due to the memory of a brave man.

Seven hundred feet, if the barometric measurement can be trusted, of very difficult rock-work now lay above us. In 1862 this height had been underestimated by both Bennen and me. Of the 14,800 feet of the Matterhorn, we then thought we had accomplished 14,600. If the barometer speaks truly, we had only cleared about 14,200. Descending the end of the *arête*, we crossed a narrow cleft, and grappled with

the rocks at the other side of it. Our ascent was oblique, bearing to the right. The obliquity at one place fell to horizontality, and we had to work on the level round a difficult protuberance of rock. We cleared the difficulty without haste, and then rose straight against the precipice. Joseph Maquignaz drew my attention to a rope hanging down the cliff, left there by himself on the occasion of his first ascent. We reached the end of this rope, and some time was lost by the guide in assuring himself that it was not too much frayed by friction. Care in testing it was doubly necessary, for the rocks, bad in themselves, were here crusted with ice. The rope was in some places a mere hempen cord surrounded by a casing of ice, over which the hands slid helplessly. Even with the rope, in this condition it required an effort to get to the top of the precipice, and we willingly halted there to take a minute's breath. The ascent was virtually accomplished, and a few minutes more of rapid climbing placed us upon the crest of the mountain. Thus ended an eight years' war between myself and the Matterhorn.

The day thus far had swung through alternations of fog and sunshine. While we were on the ridge below, the air at times was blank and chill with mist; then with rapid solution the cloud would vanish, and open up the abysses right and left of us. On our attaining the summit a fog from Italy rolled over us, and for some minutes we were clasped by a cold and clammy atmosphere. But this passed rapidly away, leaving above us a blue heaven, and far below us the sunny meadows of Zermatt. The mountains were almost wholly unclouded, and such clouds as lingered amongst them only added to their magnificence. The Dent d'Erin, the Dent Blanche, the Gabelhorn, the Mischabel, the range of heights between it and Monte Rosa, the Lyskamm, and the Breithorn were all at hand, and clear; while the Weisshorn, noblest and most beautiful of all, shook out a banner toward the north, formed by the humid southern air as it grazed the crest of the mountain.

The world of peaks and glaciers surrounding this immediate circle of giants was also open to us to the horizon. Our glance over it was brief, and our enjoyment of it intense; for it was eleven o'clock, and the work before us soon claimed all our attention. I found the *débris* of my former expedition everywhere—below, the fragments of my tents, and on the top a piece of my ladder fixed in the snow as a flagstaff. The summit of the Matterhorn is a sharp horizontal *arête*, and along this we now moved eastward. On our left was the roof-like slope of snow seen from the Riffel and Zermatt, on our right were the savage precipices which fall into Italy. Looking to the farther end of the ridge, the snow there seemed to be trodden down, and I drew my companions' attention to the apparent footmarks. As we approached the place, it became evident that human feet had been there two or three days previously. I think it was Mr. Elliot who had made this ascent—the first accomplished from Zermatt since the memorable one of 1865. On the eastern end of the ridge we halted to take a little food; not that I seemed to need it. It was the remonstrance of reason, rather than the consciousness of physical want, that caused me to do so.

Facts of this kind illustrate the amount of force locked up in the muscles which may be drawn upon without renewal. I had quitted London ill, and when the Matterhorn was attacked the illness had by no means subsided. In fact, this climb was one of the means adopted to drive the London virus from my blood. The day previously I had taken scarcely any food, and, on starting from the cabin, half a cup of bad tea, without any solid whatever, constituted my breakfast. Still, during the five hours' climb from the cabin to the top of the Matterhorn, though much below par, physically and mentally, I felt neither faint nor hungry. This is an old experience of mine upon the mountains. The Weisshorn, for example, was climbed on six meat lozenges, though it was a day of nineteen hours. Possibly this power of long-continued physical effort without eating may be a result of bad digestion, which deals out stingily, and therefore economically, to the muscles the energy of the food previously consumed?

We took our ounce of nutriment and gulp of wine (my only sustenance during the entire day), and stood for a moment silently and earnestly looking down toward Zermatt. There was a certain official formality in the manner in which the guides turned to me and asked, "*Etes-vous content d'essayer?*" A sharp responsive "*Oui!*" set us immediately in motion. It was nearly half-past eleven when we quitted the summit. The descent of the roof-like slope, already referred to, offered no difficulty; but the gradient very soon became more formidable. One of the two faces of the Matterhorn pyramid,

seen from Zermatt, falls toward the Zmutt glacier, and has a well-known snow-plateau at its base. The other face falls toward the Furgge glacier. We were on the former. For some time, however, we kept close to the *arête* formed by the intersection of the two faces of the pyramid, because nodules of rock jutted from it which offered a kind of footing. These rock protuberances helped us in another way: round them an extra rope which we carried was frequently doubled, and we let ourselves down by the rope as far as it could reach, liberating it afterward (sometimes with difficulty) by a succession of jerks. In the choice and use of these protuberances the guides showed both judgment and skill. The rocks became gradually larger and more precipitous; a good deal of time being consumed in dropping down and doubling round them. Still, we preferred them to the snow-slope at our left, as long as they continued practicable.

This they at length ceased to be, and we had to commit ourselves to the slope. It was in the worst possible condition. When snow first falls at these great heights it is usually dry, and has no coherence. It resembles, to some extent, flour, or sand, or sawdust. Shone upon by a strong sun it shrinks and becomes more consolidated, and when it is subsequently frozen it may be safely trusted. Even though the melting of the snow and its subsequent freezing may be only very partial, the cementing of the granules adds immensely to the safety of the footing; but then the snow must be employed before the sun has had time to unlock the rigidity imparted to it by the night's frost. We were on the steepest Matterhorn slope during the two hottest hours of the day, and the sun had done his work effectually. The snow seemed to offer no foothold whatever; with cautious manipulation it regaled, but to so small an extent, that the resistance due to regelation was insensible to the foot. The layer of snow was about fifteen inches thick. In treading it we came immediately upon the rock, which in most cases was too smooth to furnish either prop or purchase. It was on this slope that the Matterhorn catastrophe occurred: it is on this slope that other catastrophes will occur, if this mountain should ever become fashionable.

Joseph Maquignaz was the leader of our little party, and a cool and competent leader he proved himself to be. He was earnest and silent, save when he answered his brother's anxious and oft-repeated question, "*Es-tu bien placé, Joseph?*" Along with being perfectly cool and brave, he seemed to be perfectly truthful. He did not pretend to be "*bien placé*" when he was not, nor avow a power of holding which he knew he did not possess. Pierre Maquignaz is, I believe, under ordinary circumstances, an excellent guide, and he enjoys the reputation of being never tired. But, in such circumstances as we encountered on the Matterhorn, he is not the equal of his brother. Joseph, if I may use the term, is a man of high boiling point; his constitutional *sang-froid* resisting the ebullition of fear. Pierre, on the contrary, shows a strong tendency to boil over in perilous places.

Our progress was exceedingly slow, but it was steady and continued. At every step our leader trod the snow cautiously, seeking some rugosity on the rock beneath it. This, however, was rarely found, and in most cases he had to establish practicable attachments between the snow and the slope which bore it. No semblance of a slip occurred in the case of any one of us, and, had a slip occurred, I do not think the worst consequences could have been avoided. I wish to stamp this slope of the Matterhorn with the character that really belonged to it when we descended it, and I do not hesitate to express the belief that the giving way of any one of our party would have carried the whole of us to ruin. Why, then, it may be asked, employ the rope? The rope, I reply, all its possible drawbacks under such circumstances notwithstanding, is the safeguard of the climber. Not to speak of the moral effect of its presence, an amount of help upon a dangerous slope that might be measured by the gravity of a few pounds is often of incalculable importance; and thus, though the rope may be not only useless but disastrous if the footing be clearly lost, and the glissade fairly begun, it lessens immensely the chance of this occurrence.

With steady perseverance, difficulties upon a mountain, as elsewhere, come to an end. We were finally able to pass from the face of the pyramid to its rugged edge, feeling with comfort that honest strength and fair skill, which might have gone for little on the slope, were here masters of the situation.

Standing on the *arête* at the foot of a remarkable cliff-gable seen from Zermatt, and permitting the vision to range over the Matter-

horn, its appearance was exceedingly wild and impressive. Hardly two things can be more different than the two aspects of the mountain from above and below. Seen from the Riffel, or Zermatt, it presents itself as a compact pyramid, smooth and steep, and defiant of the weathering air. From above, it seems torn to pieces by the frosts of ages, while its vast facettes are so foreshortened as to stretch out into the distance like plains. But this under estimate of the steepness of the mountain is checked by the deportment of its stones. Their discharge along the side of the pyramid was incessant, and at any moment, by detaching a single boulder, we could let loose a cataract of them, which flew with wild rapidity, and with a clatter as loud as thunder, down the mountain. We once wandered too far from the *arête* and were warned back to it by a train of these missiles sweeping past us.

As long as the temperature of our planet differs from that of space, so long will the forms upon her surface undergo mutation, and as soon as equilibrium has been established we shall have, not peace, but death. Life is the product and accompaniment of change, and the self-same power that tears the flanks of the hills to pieces is the mainspring of the animal and vegetable worlds. Still, there is something chilling, if not humiliating, in the contemplation of the irresistible and remorseless character of those infinitesimal forces, whose summation through the ages pulls down even the Matterhorn. Hacked and hurt by time, the aspect of the mountain from its higher crags saddened me. Hitherto the impression it made was that of savage strength, but here we had inexorable decay.

This notion of decay implied a reference to a period of prime, when the Matterhorn was in the full strength of mountainhood. Thought naturally ran back to its possible growth and origin. Nor did it halt there, but wandered on through molten worlds to that nebulous haze which philosophers have regarded, and with good reason, as the proximate source of all material things. Could the blue sky above be the residue of that haze? Would the azure, which deepens on the heights, sink into utter darkness beyond the atmosphere? I tried to look at this universal cloud, containing within itself the prediction of all that has since occurred; I tried to imagine it as the seat of those forces whose action was to issue in solar and stellar systems, and all that they involve. Did that formless fog contain potentially the *sadness* with which I regarded the Matterhorn? Did the *thought* which now ran back to it simply return to its primeval home? If so, had we not better recast our definitions of matter and force; for, if life and thought be the very flower of both, any definition which omits life and thought must be inadequate, if not untrue. Are questions like these warranted? Are they healthy? Ought they not to be quenched by a life of action? Healthy or unhealthy, *can* we quench them? And if the final goal of man has not been yet attained; if his development has not been yet arrested, who can say that such yearnings and questionings are not necessary to the opening of a finer vision, to the budding and the growth of diviner powers? When I look at the heavens and the earth, at my own body, at my strength and imbecility of mind, even at these ponderings, and ask myself, Is there no being or thing in the universe that knows more about these matters than I do, what is my answer? Does antagonism to theology stand with none of us in the place of a religion? Supposing our theologic schemes of creation, condemnation, and redemption, to be dissipated; and the warmth of denial, which, as a motive force, can match the warmth of affirmation, dissipated at the same time; would the undeflected mind return to the meridian of absolute neutrality as regards these ultra-physical questions? Is such a position one of stable equilibrium? The channels of thought being already formed, such are the questions, without replies, which could run through the mind during a ten minutes' halt upon the weathered spire of the Matterhorn.